Metadata form FINAL 8/7/98

Data Used in the Clean Water Action Plan Unified Watershed Assessment

Name of Data Layer: **Tidal Water Quality "Habitat Status Index"**

Definition (General Description): This index is the mean of current status (1994-1996) information, scored according to a 10-level scale, for surface chlorophyll *a*, secchi depth and summer (July - September) bottom dissolved oxygen. Values are consolidated into a single mean for each major tidal tributary. For more information, please see "Methods used for Tidal Water Quality, SAV, Benthic IBI and Fish IBI data consolidation for the INRA/UWA project".

Data Source: Maryland Department of Natural Resources Tidal Water and Habitat Quality Monitoring Program

Data Type: Condition _X_ Stressor ____ Vulnerability ____ Trend ____ Growth ____
Other_____

Method of Calculation: Current status (1994-1996) was determined for each of the three index components according to methods used for Tributary Strategies assessments (see "Methods used for Tidal Water Quality, SAV, Benthic IBI and Fish IBI data consolidation for the INRA/UWA project" for more information). Individual components status scores were converted to a score of 1 (most degraded) to 10 (best condition) and then combined into an overall index mean by station. For 8-digit watersheds that included more than one station, these overall index means by station were then averaged to determine the watershed mean (which is the same as the overall index mean when only one station is in an 8-digit watershed). Finally, these 8-digit watershed means were averaged within larger drainage basins (for the Potomac, Patuxent, Choptank, Nanticoke, and Elk Rivers). From this last step, multiple 8-digit watersheds are given the same overall index INRA/UWA score to reflect the interactions of watersheds upstream and downstream of each other within a tributary basin.

For the UWA, watersheds are placed in Category I (needs restoration) if they are in the lower 25% of scores for the 138 watersheds for the Habitat Status Index. Watersheds are placed in Category II (needs preventative action) if they have scores in the higher 75% of scores for the 138 watersheds. Because no system is considered to be pristine, none of the watersheds are placed in Category III (pristine watersheds).

Watershed Scale: Tributary Strategy Region[1] ____ USGS 8 Digit ____ MD 6 Digit ____
MD 8 Digit_X_ MD 12 Digit ____ Adaptable to Any Scale ____Other_____

Data Custodian: Tidewater Ecosystem Assessments/RAS/DNR

Clean Water Goal: Yes ___No _X_

[1]The Youghiogeny watershed and the Coastal Bays region are considered to be Tributary Strategy Regions for the purposes of this program

If Yes: Description of Goal _____

Other Natural Resource Goal: Yes ____ No _X_
If Yes: Benchmark Goal ____ Relative Goal ____
If Benchmark Goal - Description of Benchmark _____

Assumptions _____
_____

Comments: While we have attempted to meet the needs of the INRA/UWA assessment by providing tidal water and habitat quality data in a useful way through scored indices, we have concerns about the usefulness of the resulting scores. Some of these concerns include:

- Use of relative status: The assignment of status scores to most of the individual parameters (chlorophyll *a*, and secchi depth) that are incorporated into the two indices is done using a relative scale, so they are of less usefulness in targeting restoration needs (because they are not based on numeric goals)

- The consolidation of data in overly simplistic indices: The combination of the individual parameters into the indices was done as a first-cut for the purposes of reducing the number of parameters reported to the modeling group by doing a first-level assessment of the data. The resulting indices are new, and therefore untested, and we recommend strongly that as the INRA/UWA process continues, the resulting assessments should be compared to determine consistency with established watershed assessments such as the 305b Report.

References: see "Methods used for Tidal Water Quality, SAV, Benthic IBI and Fish IBI data consolidation for the INRA/UWA project" for more information